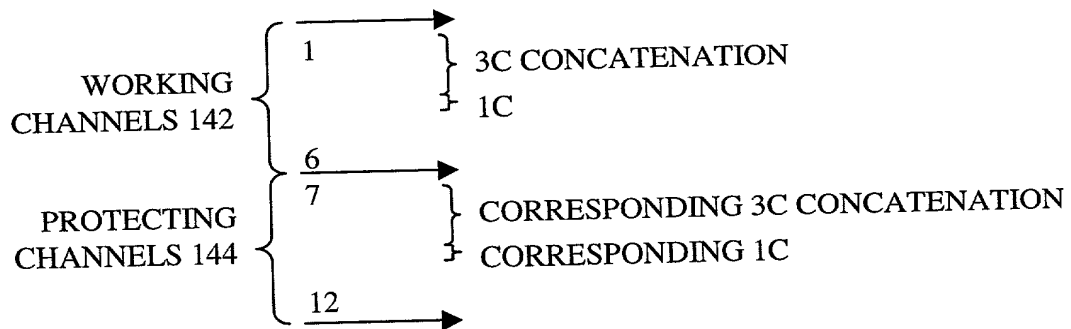
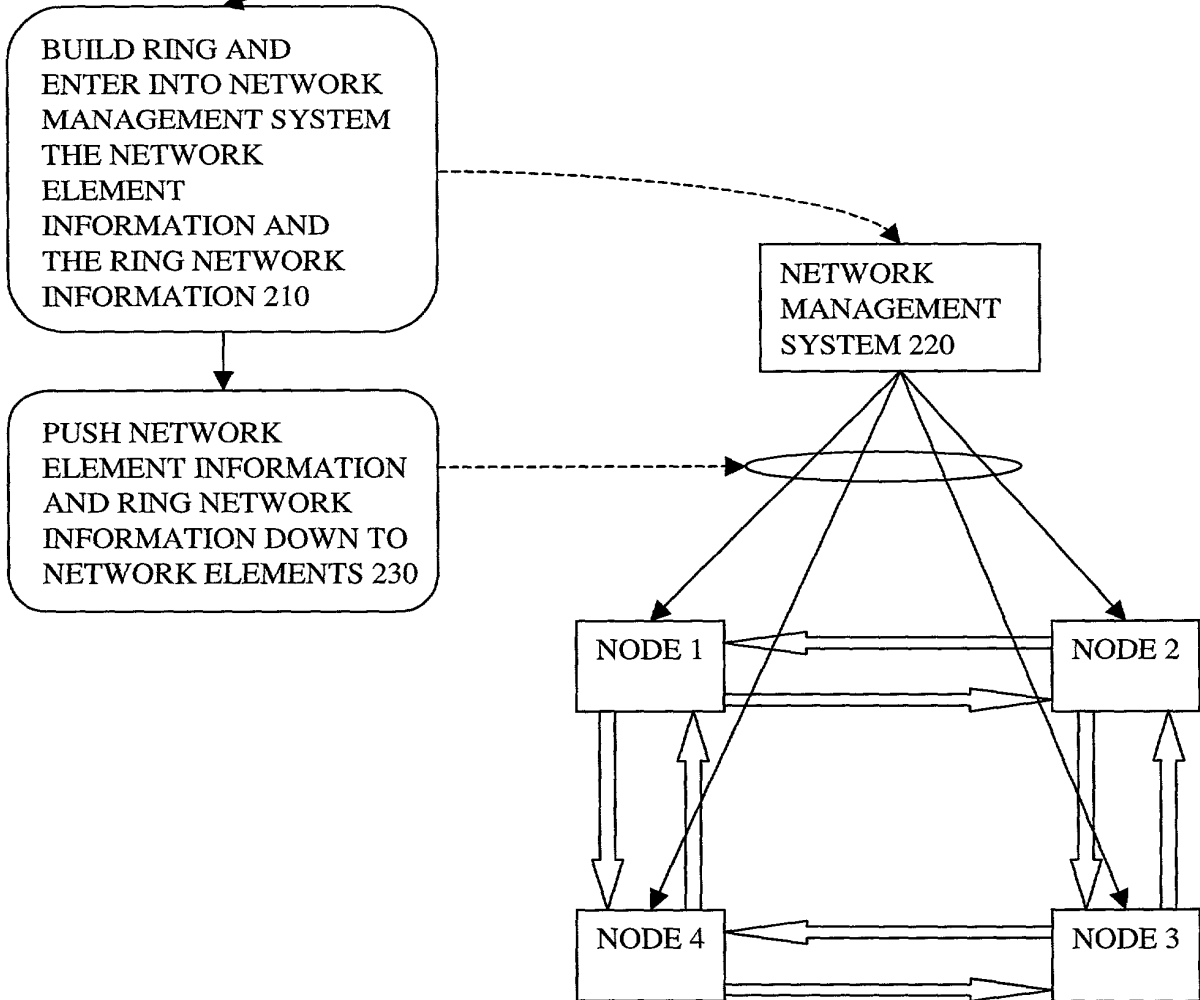


FIG. 1B (PRIOR ART)



PLAN RING, INCLUDING THE NETWORK ELEMENT INFORMATION (E.G., THE NETWORK ELEMENTS THAT WILL PARTICIPATE (INCLUDING APS NODE IDS), THE LINE CARDS AND PORTS WITHIN THOSE NETWORK ELEMENTS, THE CROSS-CONNECTIONS, ETC.) AND THE RING NETWORK INFORMATION (E.G., THE RING MAP, THE INITIAL SQUELCH TABLE FOR EACH NODE, ETC.) 200

FIG. 2
(PRIOR ART)



OC-12 LINE SWITCHED RING 300

WORKING TRAFFIC 330
CONCATENATION SIZE: 6C
WORKING CHANNELS: 1-6

WORKING TRAFFIC 310
CONCATENATION SIZE: 3C
WORKING CHANNELS: 1-3

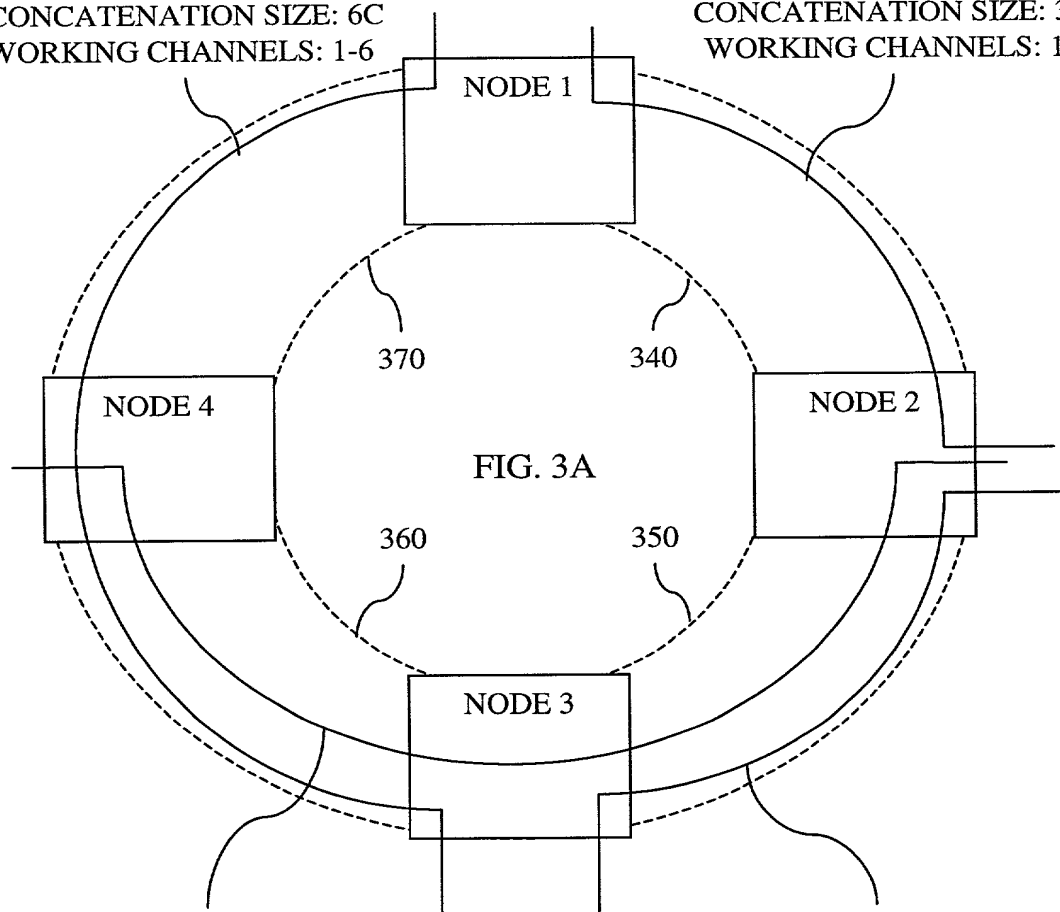
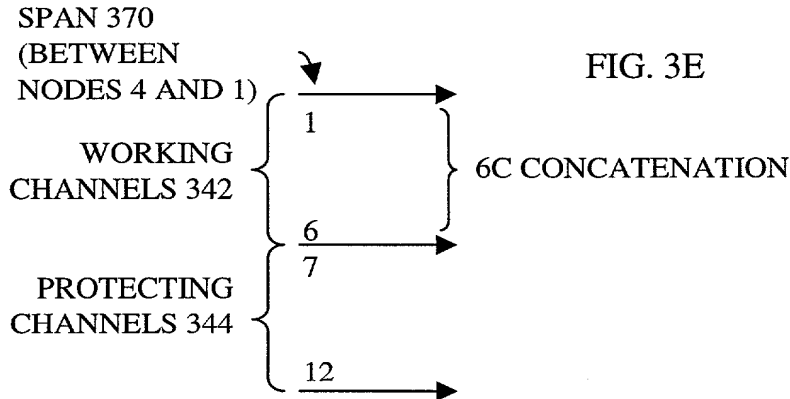
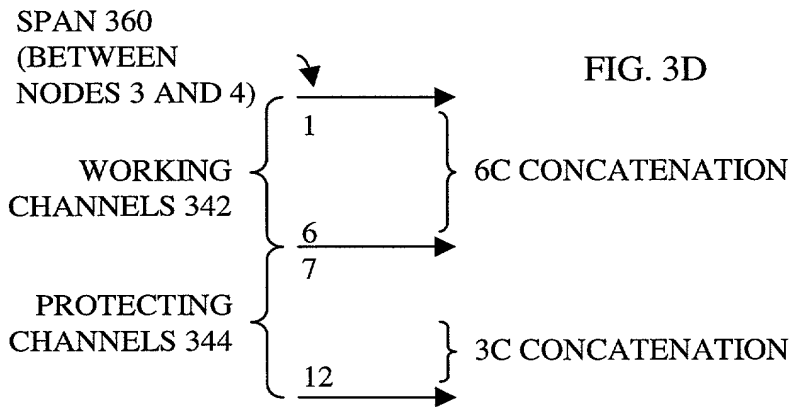
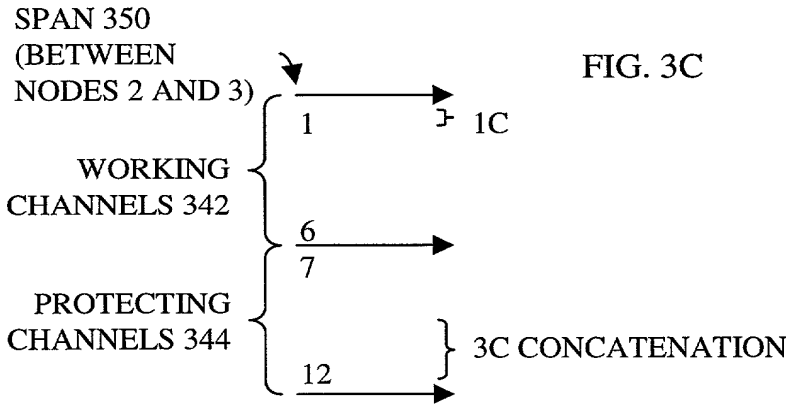
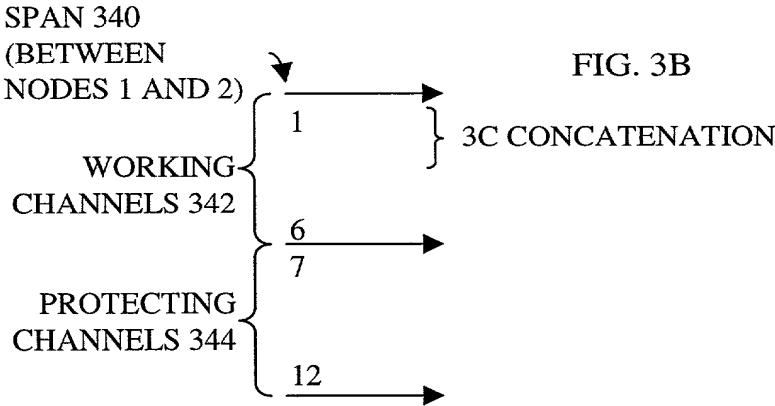


FIG. 3A

FIG. 3A



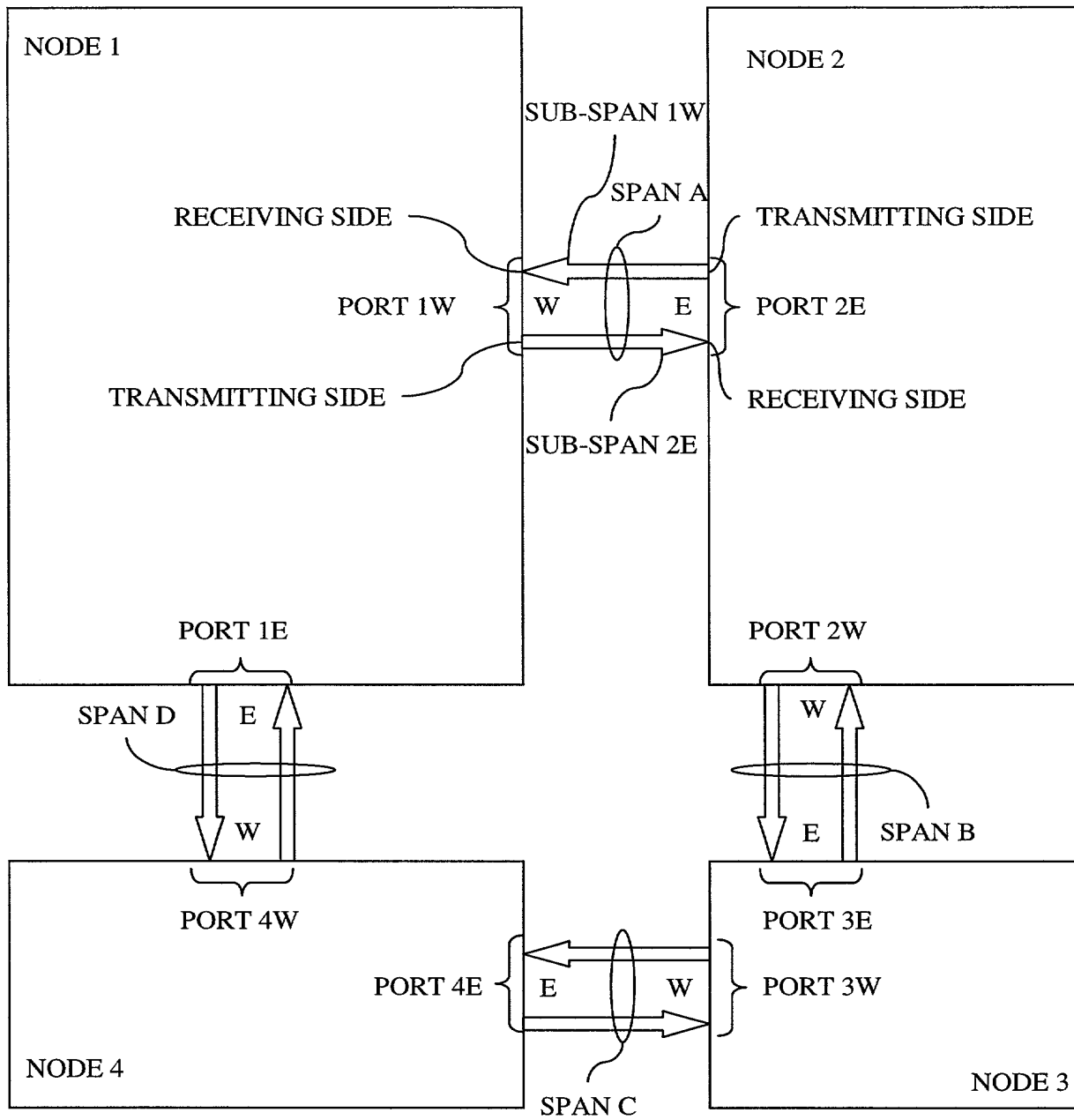


FIG. 4

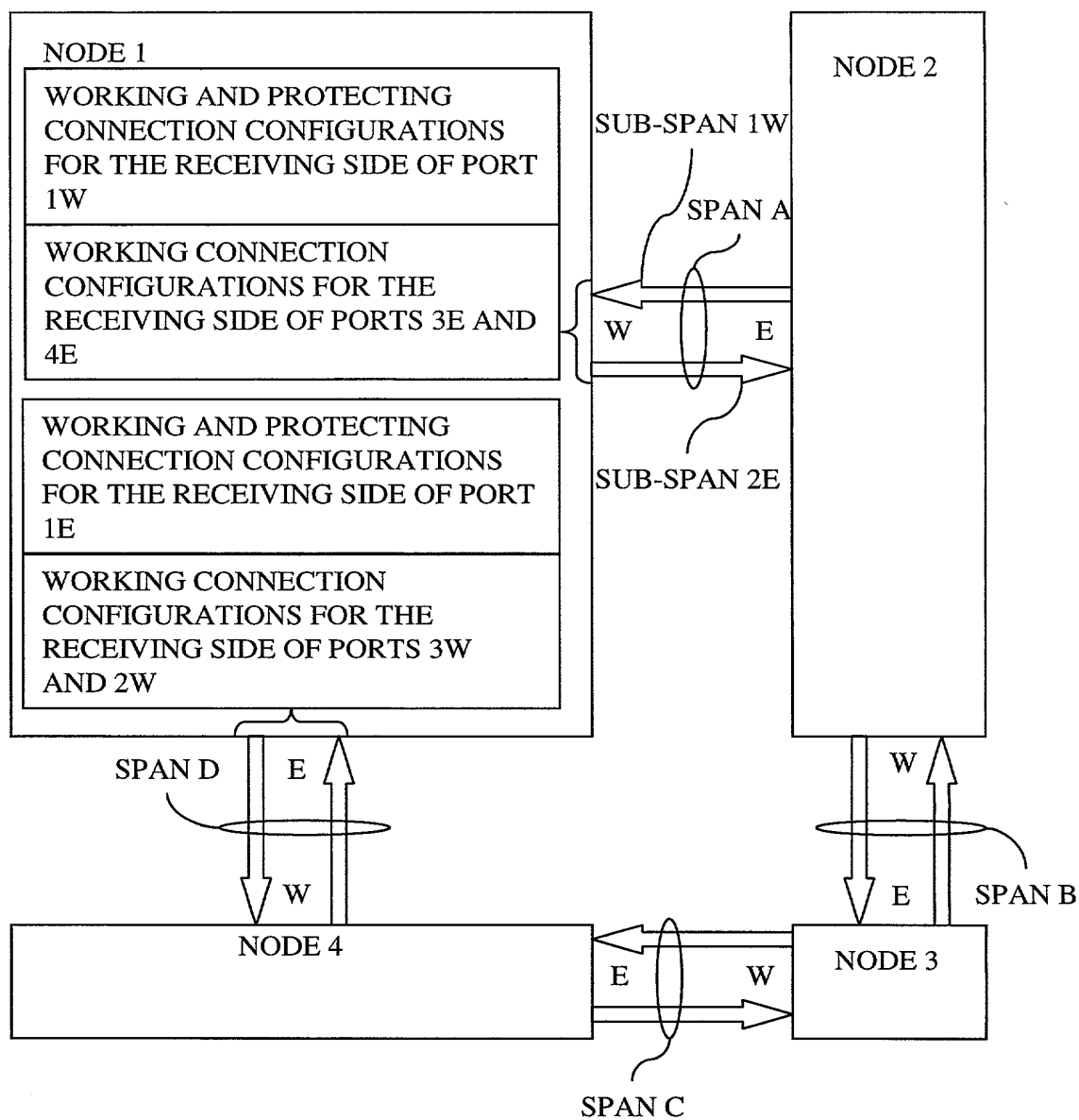


FIG. 5

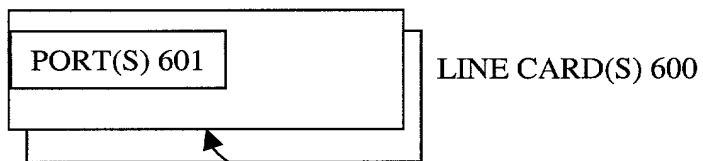


FIG. 6A

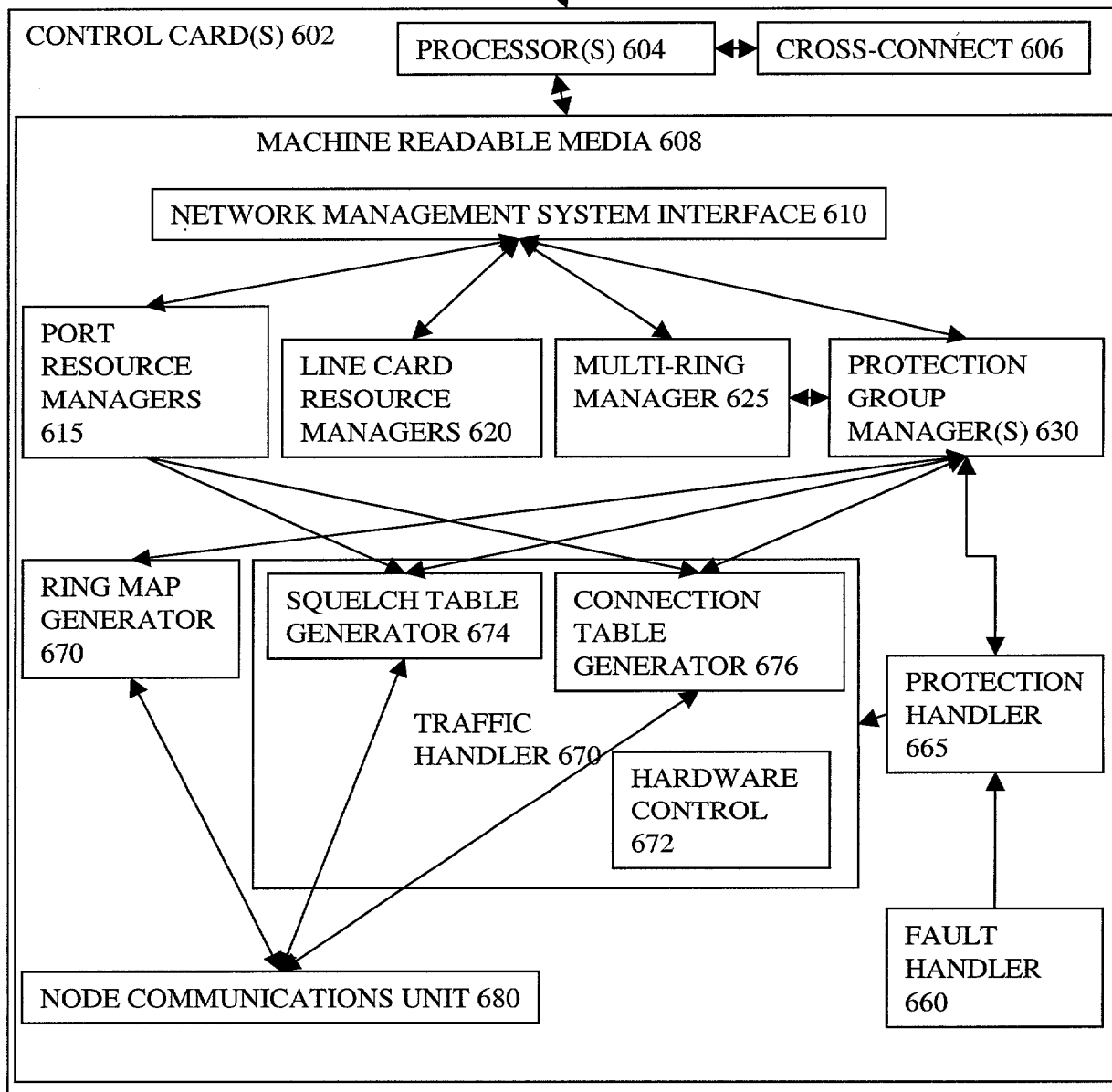
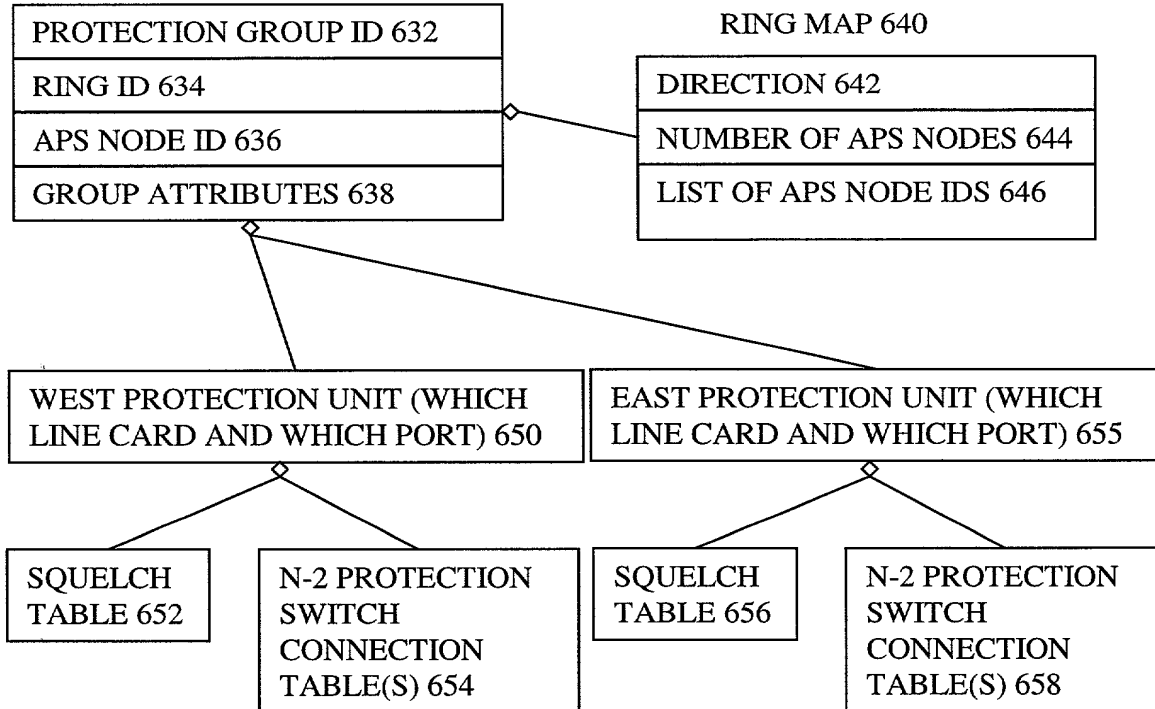


FIG. 6A

FIG. 6B

PROTECTION GROUP MANAGER 630A



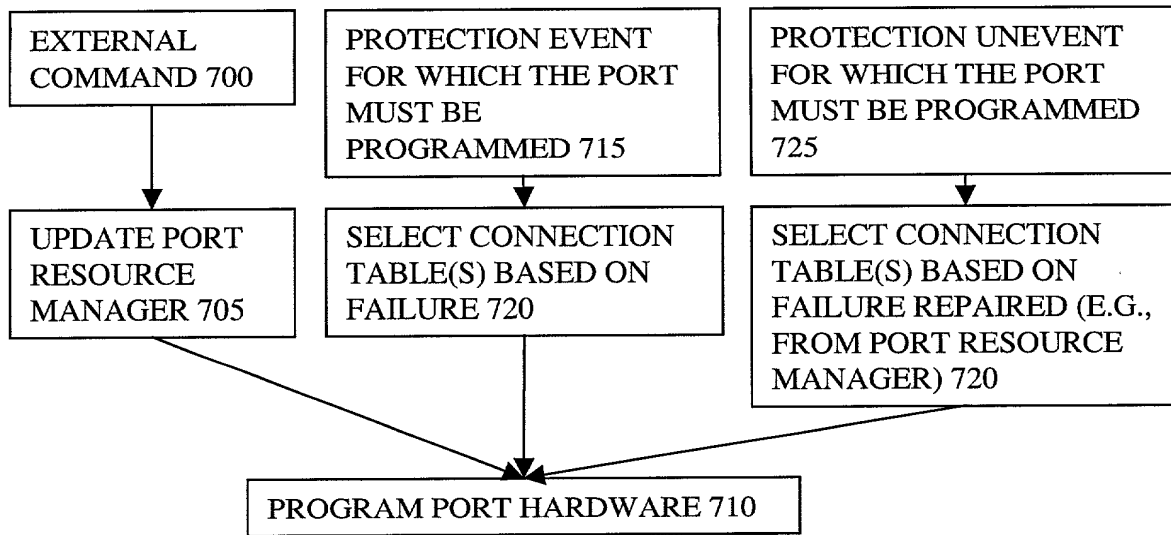


FIG. 7

[illegible]

FIG. 8

The flowchart illustrates a process for building a ring and entering network element information into a network management system. The process consists of the following steps:

- BUILD RING AND ENTER INTO NETWORK MANAGEMENT SYSTEM THE NETWORK ELEMENT INFORMATION 810**
- PUSH NETWORK ELEMENT INFORMATION DOWN TO NETWORK ELEMENTS 830**
- DISTRIBUTIVELY GENERATE THE RING NETWORK INFORMATION (E.G., THE RING MAP, THE SQUELCH TABLES FOR EACH NODE) 840**
- DISTRIBUTE THE CONNECTION TABLES 850**
- PUSH CERTAIN RING NETWORK INFORMATION (E.G., THE RING MAP) TO THE NETWORK MANAGEMENT SYSTEM 860**

The diagram also shows a **NETWORK MANAGEMENT SYSTEM 820** connected to four nodes: **NODE 1**, **NODE 2**, **NODE 3**, and **NODE 4**. The nodes are interconnected in a ring topology, with thick curved arrows indicating the flow of information between them. The network management system 820 is connected to each node via bidirectional arrows. A dashed arrow points from the first step (810) to the network management system 820. Another dashed arrow points from the third step (840) to the nodes. A third dashed arrow points from the fifth step (860) to the network management system 820.

